ENGINEERING ASSOCIATE I - TRAFFIC
ENGINEERING ASSOCIATE II - TRAFFIC

*Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are **not** intended to reflect all duties performed within the job.*

DEFINITION

To perform on traffic control projects a variety of tasks involved in monitoring the work of developers, engineers and contractors; to research and coordinate projects and activities with other departments and outside agencies; and to perform technical tasks relative to assigned areas of responsibility.

DISTINGUISHING CHARACTERISTICS

Engineering Associate I--This is the entry level class in the Engineering Associate series. This class is distinguished from the Engineer Associate II by the performance of the more routine tasks and duties assigned to positions within the series including work on smaller projects, performed under direct supervision. Since this class is typically used as a training class, employees may have only limited or no directly related work experience.

Engineering Associate II--This is the full journey level class within the Engineering Associate series. Employees within this class are distinguished from the Engineering Associate I by the performance of the full range of duties as assigned including conducting independent plan reviews and reviewing complex construction drawings. Employees at this level receive only occasional instruction or assistance as new or unusual situations arise, and are fully aware of the operating procedures and policies of the work unit.

SUPERVISION RECEIVED AND EXERCISED

Engineering Associate I - Traffic

Receives direct supervision from higher level staff.

Engineering Associate II - Traffic

Receives general supervision from higher level staff.

May exercise functional and technical supervision over engineering staff.

ESSENTIAL AND MARGINAL FUNCTION STATEMENTS--*Essential and other important responsibilities and duties may include, but are not limited to, the following:*

Essential Functions:

1. Monitor the work of developers, contractors, surveyors, and engineers; ensure compliance with applicable laws, codes and regulations.

2. Review subdivision maps, developer plans, specifications and other applications; issue permits as approved; prepare, process and file agreements.

3. Review construction drawings, zoning actions, parcel maps and tentative maps; make adjustments as necessary.

4. Review and calculate engineering quantities and estimate costs; ensure the accuracy of computations, preliminary layout and design work from field and survey data; recommend changes as appropriate.

5. Research and provide information to the public regarding development projects, off-site improvements, zoning and land use; prepare reports or other documentation.

6. Coordinate projects with other offices and outside agencies; prepare reports, schedules and cost estimates.

7. Conduct on-site inspections; document findings and necessary adjustments.

8. Apply civil engineering principles with traffic oriented applications to insure public safety and the most efficient uses of the resources available.

9. Conduct field surveys to check standards.

10. Set up, maintain, and interpret databases from information gathered by the technicians to designate where the essential traffic control devices should be located. Conduct field training for technicians and other engineering associates.

11. Perform studies to determine need for various traffic controls, including identifying hazardous locations and analyzing accident data, keying critical data into the appropriate databases, and assisting in making recommendations for changes in traffic control.

12. Interpret and streamline all technical data, establish and maintain priority ratings and schedules for the installation of traffic control devices. Disseminate all this information in one-on-one meetings with developers, engineers, architects, and consultants, as well as convey the specific applications to the layman and public officials.

13. Assist the engineering staff with presentations to developers, engineers, architects, and consultants resulting from changes.

Essential Functions:

14. Perform drafting for road markings, traffic signals, traffic control plans, make revisions to standard drawings, and develop new standards.

15. Maintain all plan review records and perform plan reviews for all types of development. Establish maintain guidelines for plan reviews which are consistent with all federal, state, and local laws, and make recommendations when the codes, standards and regulations may require expansion or change.

Marginal Functions:

1. Maintain records and files on agreements and other documentation.

2. Perform related duties and responsibilities as required.

QUALIFICATIONS

Engineering Associate I - Traffic

Knowledge of:

General engineering and land surveying principles and practices.
Survey principles and practices.
Construction practices and terminology.
Materials, tools, and equipment used in surveying and civil engineering.
Principles of mathematics as applied to surveying and engineering work.
Modern office procedures, methods, and computer equipment.

Ability to:

Learn to review engineering plans and specifications.
Learn pertinent Federal, state, and local laws, codes, and regulations including civil engineering laws and regulations.
Prepare and maintain technical engineering records and prepare reports.
Operate computer equipment.
Communicate clearly and concisely, both orally and in writing.
Establish and maintain cooperative working relationships with those contacted in the course of work.
Maintain mental capacity which allows for effective interaction and communication with others.
Maintain effective audio-visual discrimination and perception needed for:

-- *Making observations;*
-- *Communicating with others;*
-- *Reading and writing; and*
-- *Operating assigned equipment.*

Experience and Training Guidelines

Experience:

No previous experience is required.

Training:

Equivalent to a Bachelor's degree from an accredited college or university with major course work in civil engineering, land surveying or a related field.

Engineering Associate II - Traffic

In addition to the qualifications for Engineering Associate I:

Knowledge of:

Pertinent federal, state, and local laws, codes, and regulations including civil engineering laws and regulations.

Ability to:

Review and recommend modifications to civil engineering plans and specifications.
Perform technical research on engineering problems.

Experience and Training Guidelines

Experience:

Two years of engineering experience.

Training:

Equivalent to a Bachelor's degree from an accredited college or university with major course work in civil engineering, land surveying or a related field.

WORKING CONDITIONS

Environmental Conditions:

Office and field environment; exposure to dust, noise and construction equipment.

Physical Conditions:

Essential and marginal functions may require maintaining physical condition necessary for sitting and standing for prolonged periods of time.

ARB:hg Rev.07/95
CSB 8/16/95